

Celia Nogales
Federal Regulatory Relations

1275 Pennsylvania Avenue, N.W., Suite 400
Washington, D.C. 20004
(202) 383-6423

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July 7, 1992

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FEDERAL COMMUNICATIONS COMMISSION
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Donna R. Searcy
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Federal Communications Commission
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Washington, D.C. 20554

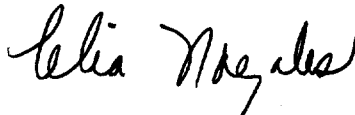
Dear Ms Searcy:

Re: *CC Docket No. 92-77 / Billed Party Preference for 0+ InterLATA Calls*

On behalf of Pacific Bell and Nevada Bell, please find enclosed an original and six copies of its "Comments" in the above proceeding.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.

Sincerely,



Enclosures

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Before the
Federal Communications Commission
Washington, DC 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Billed Party Preference) CC Docket No. 92-77
for 0+ InterLATA Calls)
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COMMENTS OF PACIFIC BELL AND NEVADA BELL

JAMES P. TUTHILL
NANCY C. WOOLF

140 New Montgomery St., Rm. 1523
San Francisco, CA 94105
(415) 542-7657

JAMES L. WURTZ

1275 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
(202) 383-6472

Attorneys for Pacific Bell
and Nevada Bell

Date: July 7, 1992

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SUMMARY

The Pacific Companies support Billed Party Preference ("BPP") as an effective way to give end users the benefit of equal access for interLATA 0+ calling. BPP will allow end users to indicate a preferred carrier that will be accessed from any phone when making an interLATA 0+ call. It will also allow all OSPs to compete equally for 0+ dialing. These benefits, however, do not come without cost. To implement BPP, LECs and OSPs¹ will need to upgrade their networks. LECs will need to upgrade to OSS7 both at the end office, and at the operator service switches for proper call processing for BPP. Other upgrades are needed to various systems, such as LIDB and AABS. The Pacific Companies are willing to upgrade their networks to allow deployment of BPP to reduce customer confusion and to stimulate competition in the operator services market, but need relief in the form of cost recovery before BPP can be implemented.

The comments set forth the Pacific Companies' service design of BPP, which minimizes problems previously identified, such as two operator involvement and redundant call detail information. This design will allow all of the benefits of BPP to be realized in the most economical and efficient manner.

¹ All abbreviations used here are fully defined in the body of these comments.

In the Matter of)
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for 0+ InterLATA Calls)
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Pacific Bell and Nevada Bell (the "Pacific Companies") file these comments pursuant to the Commission's Notice of Proposed Rulemaking ("NPRM") released May 8, 1992. The Pacific Companies support Billed Party Preference ("BPP") if it is mandated in accordance with these comments. Certain issues are critical to the Pacific Companies and, we believe, crucial to the successful deployment of BPP for handling interLATA calls.

¹ The term OSP in these comments refers to both traditional operator service providers as well as interexchange carriers that issue O+ calling cards.

support of billed party preference is also dependent upon full cost recovery. Under BPP, the Local Exchange Carriers ("LECs") perform a critical function as a conduit through which calls flow to determine the carrier of choice. However, the true benefits of BPP are realized by the end user and the OSPs. Therefore, all implementation costs incurred by the LEC must be fully recoverable.

I. SERVICE DESCRIPTION OF BILLED PARTY PREFERENCE

The Pacific Companies envision a design of BPP which minimizes some of the implementation and financial burdens set forth in earlier pleadings by other parties and allows customers to reach their selected interLATA carrier by dialing 0+. Our design minimizes redundancy and operator involvement, and, utilizing OSS7,² enables the call to be completed quickly and

² OSS7 is the signalling equivalent of SS7 for operator service trunks. Like SS7, it provides call signalling separately from the communications path. OSS7 is currently under development by the vendors, with no firm dates for availability.

efficiently. BPP lets the billed party's carrier of choice transport interLATA calling card, third party and collect calls:³

- For calls billed to calling cards, the calls will be transported by the cardholder's OSP of choice.
- For calls billed to third parties, the third party's OSP of choice will determine the carrier of the call.
- For collect calls, the billed party's number will determine the carrier of the call.

BPP works by obtaining the billing method and number from the caller. Once the caller has dialed "0" plus the called number, the call is suspended while a Line Information Data Base ("LIDB") query is initiated. LIDB will store the primary and secondary carrier information. Once the preferred carrier is determined, the call is routed to the OSP's point of presence for completion. In essence, BPP overrides the 1+ presubscription of the originating line. So, from all stations, the 0+ carrier may not necessarily be the presubscribed long distance carrier. Instead, the billed party's choice of 0+ carrier will determine the carrier of the call. This provides end users with 0+ equal access. If, for some reason, carrier identification is not available, the call will default to the carrier associated with the originating line (i.e., the presubscribed 1+ carrier).

³ All calls referred to throughout these comments shall refer to interLATA calls only.

II. DESCRIPTION OF CALL FLOW UNDER BILLED PARTY PREFERENCE

A. Use Of Calling Cards.

For either a Regional Bell Operating Company ("RBOC") line number card, and/or RAO based card, calls will be routed to the LEC operator service switch. The call will then be suspended in order to formulate and send a query to the appropriate LIDB. The database will return a validation response and the identification of the preferred carrier. The LEC's operator service switch will then set up a voice path to the preferred OSP's point of presence. (See attached diagrams for the network configuration today and with BPP.)

For non-RBOC cards, in the Card Issuer Identifier ("CIID") or 891 formats, a database look-up is not necessarily required. In most cases, the LEC's operator service switch will be able to recognize the preferred IXC by the card's unique number scheme (6 digits identify the carrier on CIID, and 3 digits identify the carrier on 891 cards). Therefore, no LIDB screening is necessary for these cards if the issuing carrier has a network presence in the area where the card is being used. However, if the LEC's operator service switch cannot route the call based on the digits on the 891 or CIID card because the card issuer has no network presence, then the call will be suspended and a query sent to the card issuer's database in order to determine the secondary carrier.

B. Calls Billed To Third Party, With AABS.

Automated Alternate Billing System ("AABS") is a feature used to more efficiently handle operator-assisted calls. It allows an end user to access services such as collect or third party billing without the use of a live operator. If an end user cannot or does not respond to AABS prompts, the end user will default to a live LEC operator.

When an end user dials 0+ and wants the call to be billed to a third party, the AABS processor will prompt the end user to press "11." The call will be suspended and LIDB will be queried for billed number screening and to determine the billed party's preferred carrier. If third party billing is permitted, the call will be routed to the preferred carrier. If necessary, the OSP operator will secure acceptance from the billed party.

When AABS is used by the LEC, duplicative operator involvement is minimized. For example, in a call originating in the Pacific Companies' region, the end user may indicate a third party billing call. The Pacific Companies will query LIDB for the preferred carrier. The switch will then establish connection with the OSP and pass forward data as to the type of call, calling and called party number, and billing number. At this point, interactive call processing by the Pacific Companies will end. However, the established call path through the LEC operator service switch remains intact throughout the duration of the call. In this way, the Pacific Companies' AABS system does not

need to ask the calling party for any information it does not need. Once third party billing is requested, the LIDB look-up is performed and the call is handed off with the relevant information to the carrier.

C. Collect Calls, With AABS.

These calls will be handled the same as third party calls. The OSP will secure the appropriate acceptance from the called party.

D. Collect Calls and Calls Billed To Third Parties, Without AABS.

If a customer chooses not to use AABS, or defaults to a LEC live operator, that operator would need to determine the type of call the customer wants to make, and the third party billing number, if appropriate. The operator would then query LIDB, and again pass the call to the preferred OSP with the same information noted above. If necessary, the OSP operator would then need to secure acceptance from the billed party. Therefore, for non-AABS calls, two operators will need to be involved with call handling. However, given the segmentation of the call outlined above, the two operators should not have to ask redundant questions.

III. BENEFITS OF BILLED PARTY PREFERENCE

The benefits of BPP include competition focused on the end user, an equal access-type environment for carriers and operator service providers, and consumer benefits of convenience and less confusion.

As the Commission notes in its NPRM, competition for 0+ traffic is centered on obtaining presubscription contracts for public phones.⁴ BPP would redirect the competitive efforts towards providing better service and lower prices to end users, as opposed to higher commissions to premises owners.

The Pacific Companies also agree with the Commission's assessment that BPP will increase parity in the operator services marketplace.⁵ By allowing any OSP to offer an 0+ calling card, all players can compete equally for the operator service business. BPP will afford OSPs the same opportunity to offer 0+ dialing regardless of the size of its premises presubscription base.

⁴ NPRM at 19.

⁵ NPRM, para. 20.

End users will also benefit from BPP because of the confusion involved in the current system. Right now, when an end user wants to make a calling card call, various decisions must be made. First, the end user must decide what type of telephone he is calling from, and who the presubscribed carrier is. He then needs to decide what type of calling card he has, and whether he can use it from that phone. He also needs to decide whether he wants to use the presubscribed carrier, or dial an access code to access the carrier of his choice. These decisions are confusing to end users. End users expect that their presubscribed carrier will be the carrier of choice, especially if they are using a LEC-issued calling card. BPP will allow the end user to realize that expectation.

Further, consumers dislike dialing access codes and/or 800 numbers to use their calling cards. Customers prefer the convenience of 0+ dialing. Research shows that 81% of card holders who need to dial access codes are interested in having 0+ access on their cards. Similarly, the Pacific Companies' focus group research has shown that dialing convenience is a most important card attribute for a majority of card holders.

Another benefit of BPP should be a downward pressure on prices. If real competition is stimulated in the field, by making 0+ dialing available to all OSPs, then lower prices and better customer service should result. Today, end users pay relatively high surcharges, presumably in order for OSPs to pay

substantial commissions to premises owners.⁶ If commissions are not the competitive necessity that they are today, then costs savings should presumably be passed on to end users.

BPP could also provide seamless O+ card features that work nationwide for both intra and interlata calls. Future plans for calling cards may include features such as voice messaging and conference calling. These features will not work without BPP because these features reside in the network, not the card. For an interLATA call, an end user will not know whether the carrier presubscribed to the telephone line he is using offers a particular feature. With BPP, though, the end user can be sure to use his chosen carrier who does offer the feature.

IV. TECHNICAL CONSIDERATIONS

A. Redundancy Of Providing Certain Information.

The service design of BPP set forth earlier in Section I minimizes the necessity of providing certain information twice. In this design, the LEC will simply gather the information as to the called number, calling number, type of call, and billing number. The LIDB query will be completed and the call data as well as validation information and the preferred carrier will be sent to the OSP. The OSP will then secure any necessary

⁶ It is our understanding that in some cases these commissions can range from 20-40% of the price of the call. If this is the case, the commission amounts could range up to \$1.00 per call, far exceeding any expected BPP unit cost.

acceptances from the billed party. By segmenting the call in this manner, neither LEC nor OSP will be requesting the same information from the caller.

Where call volumes justify it, deployment of AABS will further alleviate the redundancy problem by eliminating two operator involvement. Currently, Pacific Bell has deployed AABS throughout its network.⁷ With AABS the end user inputs the type of call, calling card or third party number, and then after the LIDB query, the call is routed to the OSP. The OSP will then perform the customer interaction and call acceptance functions. If the OSP has already deployed AABS, some costs may need to be incurred to modify its call handling sequences to reflect the Pacific Companies' approach.

The Commission seeks comment on whether the independent LECs will be able to minimize the two operator problem.⁸ Some independent companies currently contract with either a LEC or interexchange carrier for operator services. Under BPP, the calls will need to go through the LEC's operator service switch for the LIDB query to determine the preferred carrier.

The Commission also seeks comment on whether there is a customer-premises equipment alternative that could be used to store necessary information and then transmit it at the caller's

⁷ Nevada Bell's call volumes do not currently warrant deployment of AABS. With the additional call volumes under BPP, AABS may be warranted in Nevada Bell's network.

⁸ NPRM at 26.

prompting.⁹ The Pacific Companies do not believe that this is a viable alternative. Currently, after a customer enters 0+ the called number, a "bong tone" is heard which is the prompt to enter the calling card number. That "bong tone" is a unique technology which resides in the LEC's operator service switch. If that technology had to be deployed to every end office, or worse yet, to each phone set, the costs would be prohibitive. Economies of scale are maximized by placing the technology at the operator service switches. Therefore, the Pacific Companies are unaware of an acceptable alternative for use as a CPE-type solution.

B. Access Times.

The time it takes for a LEC to deliver a call to an OSP for processing should not increase after deployment of BPP. And, the availability of OSS7 should significantly reduce access time. However, the Pacific Companies have not performed any quantitative access time testing since the BPP feature and OSS7 signalling are not yet available from vendors.

C. Parameters Of BPP Service.

The Pacific Companies support a Commission mandate that all interLATA 0+ calls be subject to BPP. BPP must be ubiquitous from any telephone for the benefits to be realized. The

⁹ NPRM at 26.

requirement to implement BPP should not be limited to just LECs, as the Commission has suggested.¹⁰ BPP will not work if only LECs are required to implement BPP. If the OSP cannot receive the call detail from the LEC, for example by accepting OSS7 signalling, the call will not be able to be completed. Thus, all OSPs must be mandated to implement BPP. So, for example, if alternate access providers ("AAP") decide to enter the operator service business, they too should be subject to BPP. If all players are not required to use BPP, customer confusion will again reign, and the benefits of BPP will be undermined. Further, implementation of BPP requires LECs to incur substantial costs (see below Section V). If OSPs do not have to use BPP, then those costs may not be recoverable. Therefore, the Commission must mandate all players to participate in BPP, not just LECs.

Additionally, the Pacific Companies strongly support a Part 68 amendment that would preclude traffic aggregators, COPT, and public phone providers from using automatic dialing mechanisms to dial around BPP. The Commission has rightfully concluded¹¹ that this would be necessary in order to realize the benefits of BPP. Without a Part 68 amendment, LECs will be severely damaged, and the benefits of BPP will not be fully realized.

¹⁰ See, NPRM at 31.

¹¹ NPRM at 31.

D. Implementation Time.

It is very difficult to gauge when BPP could be implemented because many of the steps upon which implementation is dependent are not within our control. Before BPP can be implemented, the final technical requirements must be written and issued by Bellcore. That process, which includes gaining consensus in the industry as to key points of the design, could take as long as 12-18 months. Once the requirements are issued, vendors must develop the product. That process, we estimate, may take 18 months. Once the product is available, it must be tested and then deployed in the network. Testing normally takes 6 months, and deployment can take up to 2 years.¹² Assuming that the development and testing proceed in accordance with our expectation, and that the Commission issues a decision by the end of 1992, the Pacific Companies believe that implementation could begin in 1995.

E. Scope Of BPP.

The Pacific Companies believe that all interLATA 0+ calling card, collect and third party calls should be subject to BPP. This would include not only COPT, public phone, and other aggregator locations, but also traffic from any telephone. Requiring BPP ubiquitously will alleviate customer confusion and help foster competition in the operator services marketplace.

¹² These estimates are based on our experience with the intervals necessary to develop and deploy similar features.

F. Assigning An 0+ Carrier To Each Telephone Line.

The Commission seeks comment on the process by which an 0+ carrier should be assigned to each telephone line¹³. The Commission suggests two possibilities. First, the Commission suggests that the LEC could send a ballot to each subscriber for the choice of carrier. Alternately, the LEC could notify customers of their right to presubscribe to an 0+ carrier different from their 1+ carrier.

The Pacific Companies do not believe that balloting would be appropriate. Balloting is extremely expensive, causes much customer confusion, is very burdensome administratively, and would delay implementation. The costs of balloting for 0+ equal access could be upwards of \$5 million, if 1+ balloting is used as a reasonable model. The better approach would be to initialize LIDB with the customer's 1+ presubscribed IXC, but allow OSPs to advertise to customers that they have a right to have a different carrier for their 0+ service. If an end user chooses a different 0+ carrier, then the records in the LIDB database will be changed.

G. Assigning A Secondary 0+ Presubscribed Carrier.

The purpose of the secondary operator service provider is to allow nationwide "presence" for a small or regional OSP. For example, a small OSP may be the presubscribed carrier for a

¹³ NPRM at 33.

particular end user. However, if that party is travelling in an area where that primary OSP does not have network presence, the primary OSP still has an interest in having that call completed. The secondary OSP will complete the call if the primary carrier is unavailable to complete a call. The Commission seeks comment on whether the primary carrier or the end user should choose the secondary carrier.¹⁴

Because the purpose of the secondary OSP is to allow a primary OSP to maintain a national presence to ensure universal card acceptance, the primary OSP should choose the secondary OSP for any particular end user. In this way, partnering can occur between small local carriers and large national carriers. The Commission also seeks input as to whether primary OSPs could designate different secondary OSPs in different regions of the country.¹⁵ Currently, LIDB can handle a single primary carrier and a single secondary carrier, but cannot support different carriers based on the point of origin of a call.

The Commission also seeks comment on whether it would be technically and administratively feasible to permit each end user to choose its own secondary OSP.¹⁶ While it would be technically feasible to accept a secondary carrier requested by

¹⁴ NPRM at 35.

¹⁵ NPRM at 35.

¹⁶ Id.

an end user, this would not serve the purposes of BPP if the secondary carrier did not have national presence. An end user will not necessarily know where various carriers have a network presence. Therefore, the Pacific Companies do not advocate end user choice of secondary carrier.

H. Commercial Credit Cards And Foreign-Issued Calling Cards.

The Commission seeks comment on how these types of cards would be handled in a BPP environment.¹⁷ At this point, technical obstacles and low consumer demand do not justify inclusion of these in the BPP design.

I. Feasibility Of 14 Digit Screening In LIDB.

The Commission seeks comment on whether it is feasible or desirable for LECs to perform 14 digit carrier identification screening in LIDB, which would allow end users to have a line number based calling card associated with multiple OSPs.¹⁸ LIDB, however, is not designed to do 14 digit screening. The use of a Personal Identification Number ("PIN") for carrier identification is not technically or practically feasible at this time. In the Pacific Companies, the PIN may be selected by the end user. In addition, the Pacific Companies plan to offer multiple PINs for cardholders (e.g. roommates) so they can have a

¹⁷ NPRM at 34.

¹⁸ NPRM at fn. 19.

single line-number card and receive separate bills or segregated bill pages. Therefore, if the PIN were to determine carrier routing, the Pacific Companies would not be able to assign multiple PINs to a calling card for other purposes. We do not believe that this would be in the public interest.

J. Impact On The Provision Of Payphone Competition.

The Commission has posed a question on the ramifications of BPP on competition in the payphone market.¹⁹ It is important to remember that BPP must be applicable from all phones in order to insure that consumers realize the desired benefits of BPP.

In today's market, an OSP can capture the interLATA 0+ traffic from a given location by being selected as the presubscribed carrier for 0+ traffic from the payphones on the premises. The only way end users can circumvent this situation is to dial an access code or other such method to access their preferred carriers' operator services. For the privilege of being selected for the phones on the premises, the OSP pays the premises owner a commission that is typically based on revenues generated by the OSP's exclusive relationship as the interLATA 0+ carrier.

¹⁹ NPRM at 28.

From the perspective of the OSPs, the Commission has already noted that BPP would possibly shift the marketing focus from the location owner to the end users who hold the OSP's calling cards.²⁰ With the advent of BPP, the OSP would no longer be assured of the majority of traffic from the location. Instead, the penetration of their calling cards with the public would determine their percentage of 0+ revenues from the various locations. Presumably OSPs will shift their marketing focus from contracting with the premises owner to the marketing of their calling cards.

K. Other Operator-Handled Calls.

Many types of calls are handled by operators on either an 0+ or 0- basis, including person-to-person, collect calling card, and validation queries. Our design for BPP only includes 0+ calling card, collect and third party calls.

V. COSTS OF BPP

The Commission has asked for comments about the costs of BPP and how those costs are affected by the scope of billed party preference.²¹ Initially, in reply comments filed

²⁰ NPRM at 19.

²¹ NPRM at 25.

December 23, 1991, the Pacific Companies estimated the costs to implement BPP to be in excess of \$200 million. However, based on the specific design of BPP set forth in these comments, the Pacific Companies now estimate that its costs will be substantially lower than originally thought. We are now in receipt of better technical information on the product requirements, and after much industry discussion, can now better estimate the network upgrades that will be necessary. However, the Commission must understand that estimating costs for deployment of a system not yet developed is speculative. Vendor costs are unknown and it is very difficult to even get vendors to suggest a price we can use for planning purposes. Nonetheless, we will try to illustrate the cost categories involved, and our best guess as to the costs that will be involved.²²

Generally, the costs to implement BPP can be separated into network costs, administration and billing costs, operator services costs, and LIDB costs. All of the costs below assume that BPP is implemented for 0+ dialing for collect, calling card and third party calls, from any telephone.

²² Once vendor costs are known, the Pacific Companies could present a more accurate cost estimate to the Commission in an ex parte presentation. Because some vendors have indicated that those costs will not be available until 4th quarter 1992, such a presentation would not be available until after that time.

Network costs comprise the largest cost category. There are various components of network costs: operator service switch upgrades, end office upgrades, and AABS and LIDB costs. These amount to approximately \$103 million. The ongoing costs for repair, depreciation, taxes, maintenance and administration are approximately \$10-14 million.

The first component is the operator service switch upgrades. These include deployment of the BPP functionality, OSS7 signalling,²³ software upgrades, trunk hardware upgrades, and trunk plug-in units. The capital outlay and expense, including first year maintenance will be approximately \$34 million. Much of the cost is attributable to the increase in switch capacity needed to implement BPP.

End office switches will need to be upgraded to OSS7 signalling.²⁴ With BPP, end office switches need to be able to split off access code dialing from 0+ dialing. Access code dialing will be routed directly to the carrier, whereas 0+ dialing will go through the operator service switch for the LIDB query. Vendors have not yet developed this functionality for end office switches. Therefore, the costs involved are very sketchy.

²³ OSS7 signalling is necessary to pass along the call detail between the LEC operator service switch and the OSP.

²⁴ While multifrequency signalling may be able to be developed to be used with BPP, the costs for development of OSS7 do not appear to be any greater. OSS7 signalling has the added advantage of being much faster than multifrequency signalling and is consistent with the long term strategic direction of the network.